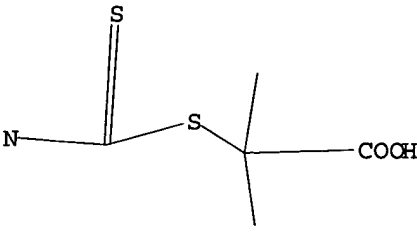


=>
Uploading C:\Program Files\Stnexp\Queries\679.str

L1 STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 full

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...

Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 17:58:53 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 23 TO ITERATE

100.0% PROCESSED 23 ITERATIONS

10 ANSWERS

SEARCH TIME: 00.00.01

L4 10 SEA SSS FUL L1

L5 17 L4

=> s l5 and py<2000

19940441 PY<2000

L6 10 L5 AND PY<2000

=> d 1-10 ibib abs hitstr

L6 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1968:434892 CAPLUS

DOCUMENT NUMBER: 69:34892

TITLE: Advancements in plant pharmacology of dithiocarbamates

AUTHOR(S): Ueyama, Akinori

CORPORATE SOURCE: Kyoto Univ., Kyoto, Japan

SOURCE: Bochu Kagaku (1967), 32(1), 11-19

From: CZ 1968, (17), Abstr. No. 1504

CODEN: BOCKAF; ISSN: 0006-5420

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

AB Nineteen carbamate derivs. were tested with regard to their auxin activity, antiauxin activity, and chemotherapeutic activity in plants. The following N,N-dimethyl-dithiocarbamates were tested (auxin activity, antiauxin activity, anti-Cladosporium cucumerinum activity given): S-carboxymethyl +, -, +; S-(1-carboxyethyl) +, -, -; S-(1-methyl-1-carboxyethyl) -, +, +; S-(ethoxycarbenthoxymethyl) -, +, +; S-(carbethoxymethyl) +, -, +; S-(1-methyl-1-carbethoxyethyl) -, +, +; S-(carbethoxymethyl) +, -, +; S-(1-methyl-1-carbamoylethyl) -, +, +; S-(N-methylcarbamoylmethyl) -, +, +; S,S-bis(N,N-dimethylthiocarbamoyl)dimercaptoacetic acid -, +, +; O-carboxymethyl N,N-dimethylthiocarbamate +, -, -; S-(carboxymethyl) N,N-diethyldithiocarbamate -, -, -; S-(carboxymethyl) N,N-dibutyldithiocarbamate -, -, -; S-(carboxymethyl)dithiocarboxylic acid Δ2-pyrrolinide -, +, +; S-(1-methyl-1-carboxyethyl)dithiocarboxylic acid Δ3-pyrrolinide -, +, -; Na dithiocarboxylic acid pyrrolidide -, +, +; S-(carboxymethyl)dithiocarboxylic acid pyrrolidide -, +, +; S-(carboxymethyl)dithiocarboxylic acid piperidide -, +, +.

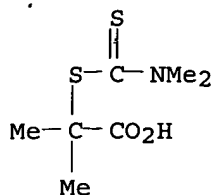
IT 20940-21-0

RL: BIOL (Biological study)

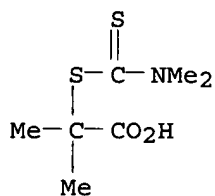
(auxin and antiauxin and fungicidal activity of)

RN 20940-21-0 CAPLUS

CN Propanoic acid, 2-[[[(dimethylamino)thioxomethyl]thio]-2-methyl- (9CI) (CA INDEX NAME)



L6 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1964:421169 CAPLUS
 DOCUMENT NUMBER: 61:21169
 ORIGINAL REFERENCE NO.: 61:3627h,3628b
 TITLE: Growth-regulating effects of amino acids and dithiocarbamic acid derivatives and their possible relation with chemotherapeutic activity
 AUTHOR(S): van Andel, O. M.
 CORPORATE SOURCE: Lab. Phytopathol., Wageningen, Neth.
 SOURCE: Phytopathologische Zeitschrift (1962), 45(1), 66-80
 From: CZ 1963(7), 2514.
 CODEN: PHYZA3; ISSN: 0031-9481
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Dithiocarbamic acid derivs. were tested for their auxin activities (epinasty test, 1st sign), anti-auxin activities (cucumber root growth test, 2nd sign), and chemotherapeutic activity (against Cladosporium cucumerium in cucumbers, 3rd sign). The dithiocarbamic acid derivs. contain both auxins and anti-auxins. Their action depends on substitution of H atoms at α -C- atoms and those of N-Me groups. On the other hand, amino acids promote growth during the 1st 24 h.
 IT 20940-21-0, Propionic acid, 2-mercapto-2-methyl-, dimethyldithiocarbamate, (-)- (plant regulator activity of)
 RN 20940-21-0 CAPLUS
 CN Propanoic acid, 2-[[[(dimethylamino)thioxomethyl]thio]-2-methyl- (9CI) (CA INDEX NAME)



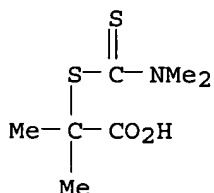
L6 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1962:444790 CAPLUS
 DOCUMENT NUMBER: 57:44790
 ORIGINAL REFERENCE NO.: 57:8966a-b
 TITLE: Fungicidal compounds
 INVENTOR(S): van der Kerk, Gerrit J. M.
 PATENT ASSIGNEE(S): N. V. Philips' Gloeilampenfabrieken
 SOURCE: 4 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 96797		19610116	NL	19550330 <--

AB Fungicidal compds. with systemic activity are the dithiocarbamates of the formula $\text{R}_1\text{R}_2\text{NC}(\text{S})\text{YR}_3\text{C}(\text{O})\text{X}$ or the formula $\text{R}_4 [\text{NR}_2\text{C}(\text{S})\text{YR}_3\text{C}(\text{O})\text{X}]_2$, in which R_1 and R_2 are H or alkyl, or may form a 5- or 6-membered ring with N; R_3

is alkylene, aralkylene or arylene; R4 = R3, or may form a ring with the NR2 groups; X is NH2, OH, ONa, or O-alkyl, O-aryl or O-aralkyl; and Y is O or S. Examples are S-1-carboxypropyl N,N-dimethyldithiocarbamate, the corresponding carboxymethyl, or 1-carboxyethyl derivs. The active compds. are applied prophylactically or on infected plants in the form of mixts. with solid or fluid carriers in usual dilns.

IT 20940-21-0, Propionic acid, 2-mercapto-2-methyl-,
dimethyldithiocarbamate
(fungicide)
RN 20940-21-0 CAPLUS
CN Propanoic acid, 2-[[[(dimethylamino)thioxomethyl]thio]-2-methyl- (9CI) (CA
INDEX NAME)



L6 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1962:55547 CAPLUS

DOCUMENT NUMBER: 56:55547

ORIGINAL REFERENCE NO.: 56:10620c-e

TITLE: Plant growth-regulating activity of S-carlsoxymethyl
N, N-dimethyldithiocarbamate and related compounds

AUTHOR(S): Pluijgers, C. W.; van der Kerk, G. J. M.

CORPORATE SOURCE: Inst. Org. Chem. T.N.O., Utrecht, Neth.

SOURCE: Recueil des Travaux Chimiques des Pays-Bas (1961), 80, 1089-1100

CODEN: RTCPA3; ISSN: 0165-0513

DOCUMENT TYPE: Journal

LANGUAGE: English

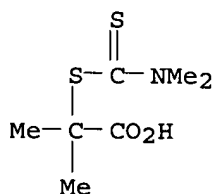
AB The growth-regulating activity of Scarboxymethyl N,N-dimethyldithiocarbamate (I) and 29 structurally related compds. on tomato was determined. The relation between structure and activity is discussed. Activity was associated with the electronic configuration of the mol., with a distinct degree of double bond character of the N-C bond. In addition, however, steric factors seemed to be of decisive significance for the presence or absence of growth-regulating activity. Methods for the synthesis of I and the related compds. are also given.

IT 20940-21-0, Propionic acid, 2-mercapto-2-methyl-,
dimethyldithiocarbamate

(preparation and plant regulating activity of)

RN 20940-21-0 CAPLUS

CN Propanoic acid, 2-[[[(dimethylamino)thioxomethyl]thio]-2-methyl- (9CI) (CA
INDEX NAME)



L6 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

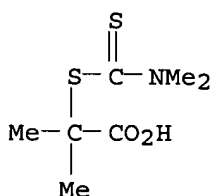
ACCESSION NUMBER: 1956:71219 CAPLUS

DOCUMENT NUMBER: 50:71219

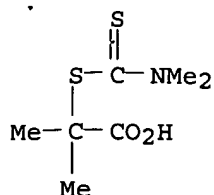
ORIGINAL REFERENCE NO.: 50:13354c-f

TITLE: New views and new results in the field of crop
protection

AUTHOR(S): Oort, A. J. P.
 CORPORATE SOURCE: Fac. agron., Wageningen, Neth.
 SOURCE: Phytiatric-Phytopharmacie (1955) 105-14
 CODEN: PHPHA6; ISSN: 0031-8876
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Influence of modern technical equipment on plant-disease occurrence and control is discussed. Artificial air-cooled storage chambers are now used in the Netherlands for improved storage of potatoes, while artificial hot-air drying preserves onions from fungus after harvesting. Oppositely, cold storage has increased disease incidence in apples. Preliminary findings with systemic fungicides are reported. S-carboxymethyl-N,N-dithiocarbamate in 10 p.p.m. concentration checked cucumber scab, while 250 p.p.m. concentration was phytotoxic; the compound also showed growth-promoting activity. S-(1-Carboxy-1-methylethyl)-N,N-dimethyldithiocarbamate had about the same chemotherapeutic activity but no growth-promoting effect. Hence, it was concluded that diffusibility in the tissues was not related to growth promotion. Seed disinfection with solns. having systemic activity (rimocidine, etc.) was effective in ascochyta infection in peas, etc., but it was not practicable to soak seeds in liquid before sowing.
 IT 20940-21-0, Propionic acid, 2-mercapto-2-methyl-, dimethyldithiocarbamate
 (as plant-growth regulator)
 RN 20940-21-0 CAPLUS
 CN Propanoic acid, 2-[[[(dimethylamino)thioxomethyl]thio]-2-methyl- (9CI) (CA INDEX NAME)



L6 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1956:1964 CAPLUS
 DOCUMENT NUMBER: 50:1964
 ORIGINAL REFERENCE NO.: 50:442g-h
 TITLE: Seasonal changes of vitamin C contents of various plants
 AUTHOR(S): Zemlyanukhin, A. A.
 CORPORATE SOURCE: State Univ., Voronezh
 SOURCE: Agrobiologiya (1955), (No. 2), 136-7
 CODEN: AGRBAU; ISSN: 0365-2696
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 AB Ascorbic acid was determined in the leaves and stems of beets, cabbages, and cucumbers. The ascorbic acid content was found to vary not only with the position on the plant and with its stage of growth, but also with environmental factors such as sunlight, temperature, moisture, and mineral content.
 IT 20940-21-0, Propionic acid, 2-mercapto-2-methyl-, dimethyldithiocarbamate
 (systemic fungicidal activity of)
 RN 20940-21-0 CAPLUS
 CN Propanoic acid, 2-[[[(dimethylamino)thioxomethyl]thio]-2-methyl- (9CI) (CA INDEX NAME)



L6 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

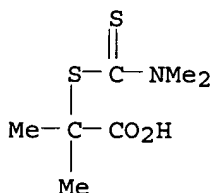
ACCESSION NUMBER: 1956:1963 CAPLUS
 DOCUMENT NUMBER: 50:1963
 ORIGINAL REFERENCE NO.: 50:442f-g
 TITLE: Investigations on plant chemotherapy
 AUTHOR(S): van Raalte, M. H.; Sijpesteijn, A. Kaars; van der Kerk, G. J. M.; Oort, A. J. P.; Pluygers, C. W.
 CORPORATE SOURCE: Lab. Phytopathol., Wageningen, Neth.
 SOURCE: Mededel. Landbouwhogeschool Opzoekinsstas. Staat Gent (1955), 20, 543-55
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Theoretical considerations regarding structure and fungicidal effect led to the synthesis of compds. with the general formula $\text{Me}_2\text{NC}(:\text{S})\text{X}$, where X = alkyl or alkylthio. Some of these compds. applied to roots of cucumber plants render the tops less susceptible to infection with *Cladosporium cucumerinum*. This is especially the case with $\text{Me}_2\text{NC}(:\text{S})\text{SCH}_2\text{CO}_2\text{H}$. The same influence is found with the related $\text{Me}_2\text{NC}(:\text{S})\text{Pr}$.

IT 20940-21-0, Propionic acid, 2-mercapto-2-methyl-, dimethyldithiocarbamate (systemic fungicidal activity of)

RN 20940-21-0 CAPLUS

CN Propanoic acid, 2-[[[(dimethylamino)thioxomethyl]thio]-2-methyl- (9CI) (CA INDEX NAME)



L6 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1955:86468 CAPLUS
 DOCUMENT NUMBER: 49:86468
 ORIGINAL REFERENCE NO.: 49:16304g-i
 TITLE: A new type of plant-growth-regulating substances
 AUTHOR(S): van der Kerk, G. J. M.; van Raalte, M. H.; Sijpesteijn, A. Kaars; van der Veen, R.
 CORPORATE SOURCE: Inst. Org. Chem. T. N. O., Utrecht, Neth.
 SOURCE: Nature (London, United Kingdom) (1955), 176, 308-10
 CODEN: NATUAS; ISSN: 0028-0836
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable

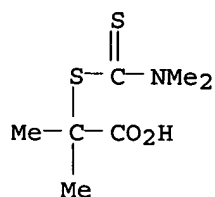
AB Carboxymethyl dimethyldithiocarbamate (I) produced growth responses similar to those brought about by synthetic growth substances when applied to tomato, pea, and cucumber plants. I was also active when applied to the soil of potted plants and initiated roots of tomato and *Phaseolus*. Several derivs. of I exhibited similar properties.

IT 20940-21-0, Propionic acid, 2-mercapto-2-methyl-, dimethyldithiocarbamate (as plant-growth regulator)

RN 20940-21-0 CAPLUS

CN Propanoic acid, 2-[[[(dimethylamino)thioxomethyl]thio]-2-methyl- (9CI) (CA

INDEX NAME)



L6 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1954:3420 CAPLUS
DOCUMENT NUMBER: 48:3420
ORIGINAL REFERENCE NO.: 48:597e-i,598a
TITLE: N-Disubstituted derivatives of dithiocarbamic acid
AUTHOR(S): Nachmias, Germaine
SOURCE: Ann. chim. (Paris) (1952), 7, 584-631
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

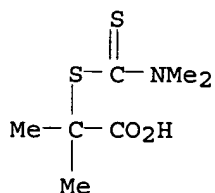
GI For diagram(s), see printed CA Issue.

AB Derivs. of AX, where X = S₂CNMe₂, S₂CNC₅H₁₀, and S₂CR (R = morpholino) were studied. The compds. with A = HOCH₂CH₂, MeCOCH₂, and NCCH₂ were prepared from the NaX with HOCH₂CH₂Cl, MeCOCH₂Cl, and NCCH₂Cl, resp. The HO₂CCH₂X, after esterification, gave the amides, hydrazides, and phenylhydrazides. The following AX are listed: A, X = S₂CNMe₂ M.p., S₂CNC₅H₁₀ M.p., S₂CR M.p.; HOCH₂CH₂, (b. 162°), 18, 47; PhNHCO₂CH₂CH₂, 103, 92, 152; p-O₂NC₆H₄CO₂CH₂CH₂, 141, 91, 117; c-HO₂CC₆H₄CO₂CH₂CH₂, 109, 125, 128; HO₂CCH₂CH₂CO₂CH₂CH₂, 80, 56, 97; cis-HO₂CCH₂:CHCO₂CH₂CH₂, , , 100; MeCOCH₂, 73, 62, 94; NH₂N:CMech₂, 127, 84, 98; 2,4-(O₂N)₂C₆H₄NHN:CMech₂, 146, 135, 147; NH₂CONHN:CMech₂, 2171, 183, 186; NH₂CSNHN:CMech₂, 176, 175, 186; HON:CMech₂, 101, 110, 102; NCCH₂, 73, 74, 103; HCl.NH:C(OEt)CH₂, 140, 190, 1391; NH:C(OEt)CH₂, 58, 54, 79; HON:C(NH₂)CH₂, 162, 77, 156; p-O₂NC₆H₄CO₂N:C(NH₂)CH₂, 195, , ; HO₂CCH₂, , 143, 162; MeO₂CCH₂, 48, 59.5, 57; EtO₂CCH₂, 60, 68, 70; H₂NCOCH₂, 125, 143, 155; NH₂NHCOCH₂, 134, 141, 133; PhNHNHCOCH₂ 295, 185, 84; 1Decompn.; The following addnl. AS₂CNMe₂ are also listed (A and m.p. given): AcON:CMech₂, 191°; BzON:CMech₂, 167°; HON:C(NHCONHPh)CH₂, 139°; HO₂CCHMe, 135°; HO₂CCMe₂, 137°; PrO₂CCH₂, 44°; MeO₂CCHMe, 38.5°; EtO₂CCHMe, 59.5°; MeNHCCH₂, 115°; PhCH₂NHCCH₂, 112°; H₂NCOCHMe, 127°; MeNHCCHMe, 95°; H₂NCOCHMe₂, 69°; MeNHCCHMe₂, 61°; (NHCCH₂), m. 278°; Me₂C:NNHCCH₂, m. 159-60°; and PhCH₂C(CO₂H):NNHCCH₂, m. 63°.

IT 20940-21-0, Propionic acid, 2-mercapto-2-methyl-, dimethyldithiocarbamate (preparation of)

RN 20940-21-0 CAPLUS

CN Propanoic acid, 2-[[[(dimethylamino)thioxomethyl]thio]-2-methyl- (9CI) (CA INDEX NAME)



L6 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1952:24619 CAPLUS
DOCUMENT NUMBER: 46:24619
ORIGINAL REFERENCE NO.: 46:4175g-i
TITLE: Chemical structure and antibacterial action in vitro

of a series of N-substituted dithiocarbamylic acid esters

AUTHOR(S):

Quevauviller, A.; Chabrier, P.; Nachmias, G.; Maillard, G.

CORPORATE SOURCE:

Faculte pharm., Paris

SOURCE:

Annales Pharmaceutiques Francaises (1951), 9, 638-41

CODEN: APFRAD; ISSN: 0003-4509

DOCUMENT TYPE:

Journal

LANGUAGE:

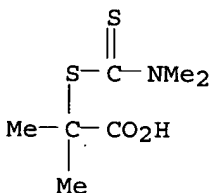
Unavailable

AB In the general formula RR_1NCSSR_2 the N is substituted by Me_2 , $O(C_2H_4)_2$, or $(CH_2)_5$, and R_2 is C_2H_4OH , CH_2COMe , CH_2CN , CH_2CO_2H , $CHMeCO_2H$, CMe_2CO_2H , $C_2H_4NMe_2$, and $C_2H_4NMe_3X$, X being halogen. The esters were tested with *Staphylococcus pyogenes aureus*, *Escherichia coli*, *Bacillus mesentericus*, and *Pseudomonas aeruginosa*. If the Na salts of the acids had strongly antiseptic qualities, the activity of the esters varied widely depending on the nature of R_2 . The activity increased in the sequence: morpholine, Me_2NH , piperidine.

IT 20940-21-0, Propionic acid, 2-mercapto-2-methyl-, dimethyldithiocarbamate (as bactericide)

RN 20940-21-0 CAPLUS

CN Propanoic acid, 2-[[[(dimethylamino)thioxomethyl]thio]-2-methyl- (9CI) (CA INDEX NAME)

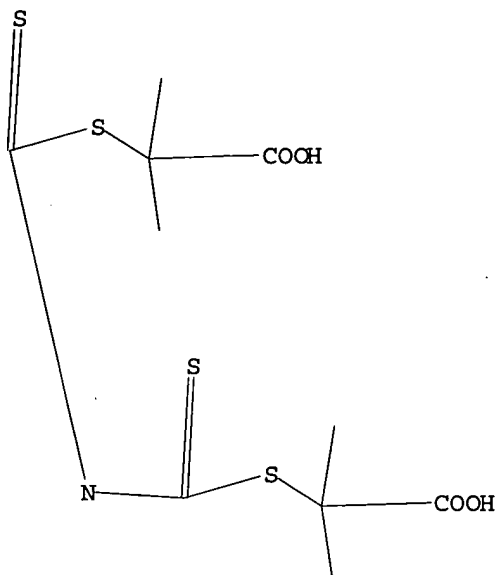


L7 . STRUCTURE UPLOADED

=> d

L7 HAS NO ANSWERS

L7 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 17

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...

Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 18:00:49 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 0 TO 0

PROJECTED ANSWERS: 0 TO 0

L8 0 SEA SSS SAM L7

L9 0 L8

=> s 17 full

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...

Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

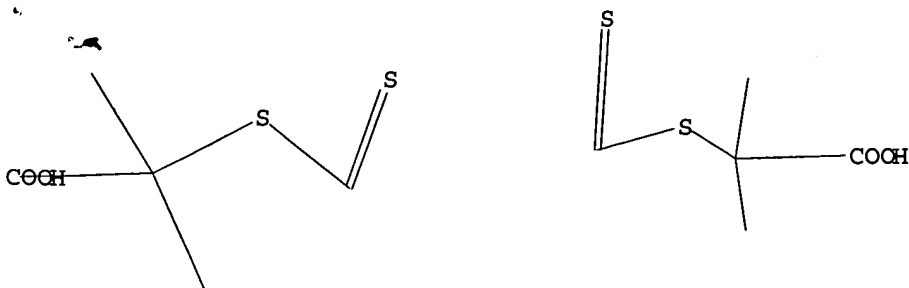
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FULL SCREEN SEARCH COMPLETED - 2 TO ITERATE

100.0% PROCESSED 2 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

L10 0 SEA SSS FUL L7

L11 0 L10

=>



Structure attributes must be viewed using STN Express query preparation.

=> s l15

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 18:17:33 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED 1 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1 TO 80
PROJECTED ANSWERS: 0 TO 0

L16 0 SEA SSS SAM L15

L17 0 L16

=> s l15 sss full

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 18:17:53 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 5 TO ITERATE

100.0% PROCESSED 5 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01

L18 2 SEA SSS FUL L15

L19 3 L18

=> d 1-3 ibib abs hitstr

L19 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:140871 CAPLUS
DOCUMENT NUMBER: 142:221243
TITLE: Associative thickeners for aqueous systems

INVENTOR(S): Lai, John Ta-yuan; Hsu, Shui-jen Raymond
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Ser. No. 681,679.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 7
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005038280	A1	20050217	US 2004-923271	20040820
US 6596899	B1	20030722	US 2000-505749	20000216
US 2003120101	A1	20030626	US 2002-278335	20021023
US 2004073056	A1	20040415	US 2003-681679	20031008
PRIORITY APPLN. INFO.:			US 2000-505749	A2 20000216
			US 2002-278335	A2 20021023
			US 2003-681679	A2 20031008

OTHER SOURCE(S): MARPAT 142:221243

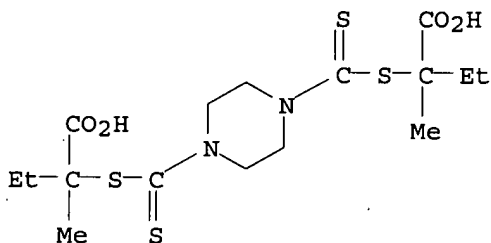
AB Thiocarbonate compds. are utilized as a rheol. modifier or associative thickener. The thiocarbonate compds. thicken or increase the viscosity of a composition, preferably an aqueous composition when used in an effective amount. The thiocarbonate compds. include ≥ 1 hydrophilic group containing repeat unit such as derived from acrylic acid, and ≥ 1 hydrophobic group to enhance association with other compds. and thus increase viscosity of a composition. Aqueous composition comprising a latex and thiocarbonate associative thickeners are described. Thus, 5.78 g trithiocarbonate and 50 g Brij 58 were reacted in the presence of p-toluenesulfonic acid monohydrate at 130°, 59.28 g of the resulting product was used in the polymerized of 200 g acrylic acid in the presence of AIBN at 80°, and neutralized with 50% sodium hydroxide to give a thickener, showing good thickening effect when used for an aqueous latex paint composition.

IT 548761-50-8

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of associative thickeners for aqueous systems)

RN 548761-50-8 CAPLUS

CN Butanoic acid, 2,2'-[1,4-piperazinediylbis(carbonothioylthio)]bis[2-methyl-(9CI) (CA INDEX NAME)



L19 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:310877 CAPLUS

DOCUMENT NUMBER: 140:321908

TITLE: S-(α, α' -disubstituted- α'' -acetic acid) substituted dithiocarbamate derivatives for controlled radical polymerizations, process, and polymers

INVENTOR(S): Lai, John Ta-Yuan

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 33 pp., Cont.-in-part of U.S. Pat. Appl. 2003 120,101.
 CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004073056	A1	20040415	US 2003-681679	20031008
US 6596899	B1	20030722	US 2000-505749	20000216
US 2003120101	A1	20030626	US 2002-278335	20021023
WO 2004037780	A1	20040506	WO 2003-US33476	20031021
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
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EP 1554241	A1	20050720	EP 2003-773311	20031021
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2005014910	A1	20050120	US 2004-782363	20040219
US 2005009999	A1	20050113	US 2004-913972	20040806
US 2005038280	A1	20050217	US 2004-923271	20040820
PRIORITY APPLN. INFO.:				
			US 2000-505749	A2 20000216
			US 2002-278335	A2 20021023
			US 2002-219403	A2 20020815
			US 2003-681679	A 20031008
			WO 2003-US33476	W 20031021

OTHER SOURCE(S): MARPAT 140:321908

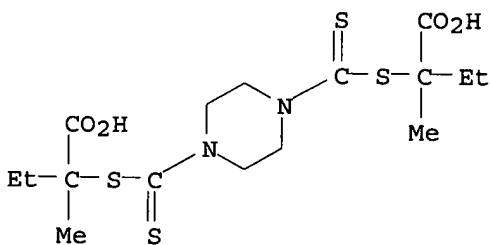
AB The dithiocarbamate compds. can be used as initiators, chain transfer agents, and/or terminators in controlled free radical polymns. The dithiocarbamates can be used to produce polymers having narrow mol. weight distribution. Advantageously, the compds. can also introduce functional groups into the resulting polymers. The dithiocarbamate compds. have low odor and are substantially colorless.

IT 548761-50-8P 548761-54-2P

RL: CAT (Catalyst use); IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(S-(α,α' -disubstituted- α'' -acetic acid) substituted dithiocarbamate derivs. for controlled radical polymns.)

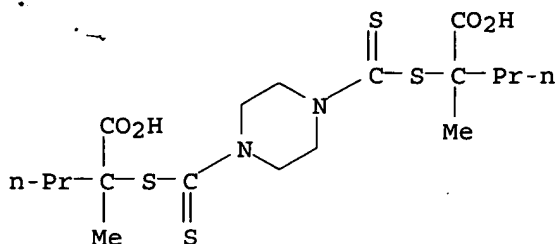
RN 548761-50-8 CAPLUS

CN Butanoic acid, 2,2'-[1,4-piperazinediylbis(carbonothioylthio)]bis[2-methyl- (9CI) (CA INDEX NAME)



RN 548761-54-2 CAPLUS

CN Pentanoic acid, 2,2'-[1,4-piperazinediylbis(carbonothioylthio)]bis[2-methyl- (9CI) (CA INDEX NAME)



L19 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:492750 CAPLUS

DOCUMENT NUMBER: 139:69656

TITLE: S-(α,α' -disubstituted- α'' -acetic acid) substituted dithiocarbamate derivatives for controlled radical polymerizations, process and polymers made therefrom

INVENTOR(S): Lai, John Ta-yuan

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 34 pp., Cont.-in-part of U.S. Ser. No. 505,749.

CODEN: USXXCO

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LANGUAGE: English

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US 2004073056	A1	20040415	US 2003-681679	20031008
WO 2004037780	A1	20040506	WO 2003-US33476	20031021
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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PRIORITY APPLN. INFO.:
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US 2002-219403 A2 20020815
US 2002-278335 A2 20021023
US 2003-681679 A 20031008
WO 2003-US33476 W 20031021

OTHER SOURCE(S): MARPAT 139:69656

AB Dithiocarbamate derivs. are disclosed, along with a process for preparing the same. The dithiocarbamate compds. can be utilized as initiators, chain transfer agents and/or terminators in controlled free radical polymerization (e.g., of styrene). The dithiocarbamates can be used to produce polymers having narrow mol. weight distribution. Advantageously, the compds. of the present invention can also introduce functional groups into the resulting polymers. The dithiocarbamate compds. have low odor and are substantially colorless. HO₂CCMe₂SC(:S)SCMe₂CO₂H was prepared from CS₂, CHCl₃, acetone, and BuNH₄SO₄.

IT 548761-50-8P 548761-54-2P

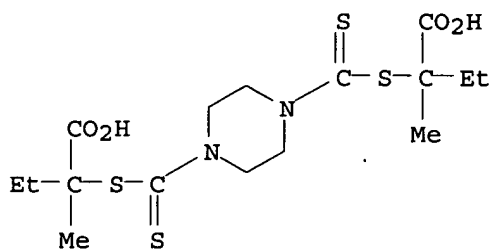
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